WO 02/098816 PCT/CA02/00812

## THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

- 1. An aqueous emulsion, for addition to an aqueous gypsum slurry, comprising:
  - a hydrocarbon wax;
  - a polyolefin-maleic anhydride graft polymer;
  - polyvinyl alcohol.
- 2. The emulsion of claim 1 wherein said polyolefin-maleic anhydride graft polymer includes at least one maleic anhydride group grafted onto a polyolefin backbone.
- 3. The emulsion of claim 2 wherein said polyolefin backbone is polyethylene.
- 4. The emulsion of claim 1 wherein said hydrocarbon wax is a paraffin wax.
- 5. The emulsion of claim 1 wherein the polyvinyl alcohol is chosen from the group comprising partially or fully hydrolyzed polyvinyl acetate and mixtures thereof.
- 6. The emulsion of claim 5 wherein the polyvinyl alcohol comprises at least 80% hydrolyzed polyvinyl acetate.
- 7. The emulsion of claim 1 wherein the hydrocarbon wax is selected from the group consisting of paraffin wax, carnuba wax, polyethylene wax, synthetic wax esters, acid waxes, maleated hydrocarbons, and combinations thereof.

WO 02/098816 PCT/CA02/00812

8. A gypsum slurry composition, for use in making gypsum products, comprising a mixture of:

- a) an aqueous gypsum slurry; and,
- b) an emulsion comprising:
  - a hydrocarbon wax;
  - a polyolefin-maleic anhydride graft polymer;
  - polyvinyl alcohol.
- 9. The composition of claim 8 wherein said polyolefin-maleic anhydride graft polymer includes at least one maleic anhydride group grafted onto a polyolefin backbone.
- 10. The composition of claim 9 wherein said polyolefin backbone is polyethylene.
- 11. The composition of claim 8 wherein said hydrocarbon wax is a parrafin wax.
- 12. The composition of claim 8 wherein the polyvinyl alcohol is chosen from the group comprising partially or fully hydrolyzed polyvinyl acetate and mixtures thereof.
- 13. The composition of claim 12 wherein the polyvinyl alcohol comprises at least 80% hydrolyzed polyvinyl acetate.
- 14. The composition of claim 8 wherein the hydrocarbon wax is selected from the group consisting of paraffin wax, carnuba wax, polyethylene wax, synthetic wax esters, acid waxes, maleated hydrocarbons, and combinations thereof.